FUTURE FISHERIES IMPROVEMENT PROGRAM
GRANT APPLICATION
(please fill in the highlighted areas)

I. APPLICANT INFORMATION

A. Applicant Name: Bitter Root Water Forum

B. Mailing Address: PO Box 1247

C. City: Hamilton State: MT Zip: 59840

Telephone: 406-375-2272 E-mail: heather@brwaterforum.org

D. Contact Person: Heather Mullee

Address if different from Applicant:

City: State: Zip:

Telephone: E-mail:

E. Landowner and/or Lessee Name (if other than Applicant):

Mailing Address:

City: State: Zip:

Telephone: E-mail:

II. PROJECT INFORMATION*

A. Project Name: Watershed Improvement through Sediment Reduction in Upper Sleeping Child Creek and Rye Creek

River, stream, or lake: Sleeping Child Creek and Rye Creek

Location: Township: 3N Range: 19W Section: 1,3,11
Latitude: 46.03 Longitude: -113.83 *within project (decimal degrees)*

County: Ravalli

B. Purpose of Project:

The purpose of this project is to decommission a minimum of 20 miles of roads in the Sleeping Child and Rye Creek drainages to reduce chronic sediment delivery and improve stream health in Sleeping Child and Rye Creeks—resulting in beneficial impacts to the Bitterroot River.
Specific restoration goals include:

1. Restoring watershed function, soil productivity and fish habitat
2. Improving infiltration of water into old road surfaces to help restore road surfaces to help restore hydrologic connections
3. Reestablishing natural stream characteristics at road crossings
4. Reducing sediment transport from road surfaces into streams

C. Brief Project Description:

Physical treatments will include full and partial recontouring of at least 20 miles of roads, removal of at least 19 stream-crossing culverts to reestablish natural drainage at stream crossings and reestablish hydrologic connection. The recontoured roads will be seeded with native grasses, treated with organic fertilizers, and mulched with weed free straw and woody debris where available. This project will improve stream conditions by reducing sediment inputs into Upper Sleeping Child and Rye Creeks. Soil productivity and infiltration will be improved by returning 20 miles of roads back to productive land base. Habitat for Bull Trout and Westslope Cutthroat Trout will be improved by a reduction in chronic fine sediment.

D. Length of stream or size of lake that will be treated: >10 miles

E. Project Budget:

Grant Request (Dollars): $ 55000

Contribution by Applicant (Dollars): $ _____ In-kind $ _____
(salaries of government employees are not considered as matching contributions)

Contribution from other Sources (Dollars): $ $166,500.00 In-kind $ $26,980.00
(attach verification - See page 2 budget template)

Total Project Cost: $ 248480

F. Attach itemized (line item) budget – see template

G. Attach specific project plans, detailed sketches, plan views, photographs, maps, evidence of landowner consent, evidence of public support, and/or other information necessary to evaluate the merits of the project. If project involves water leasing or water salvage complete supplemental questionnaire (fwp.mt.gov/habitat/futurefisheries/supplement2.doc).

H. Attach land management and maintenance plans that will ensure protection of the reclaimed area.

III. PROJECT BENEFITS*

A. What species of fish will benefit from this project?:

Bull Trout and Westslope Cutthroat Trout

B. How will the project protect or enhance wild fish habitat?:

Since increased sediment loading in streams is so detrimental to fish health, a reduction in sediment delivery will enhance habitat for Bull Trout and Westslope Cutthroat Trout.

C. Will the project improve fish populations and/or fishing? To what extent?:

Yes. By reducing the amount of sediment delivered directly into these sediment impaired streams, fines will be reduced and spawning gravels will be increased.

D. Will the project increase public fishing opportunity for wild fish and, if so, how?:

Sleeping Child Creek is a popular fishing stream and by improving local habitat the public fishing opportunities will also improve. Rye Creek has the potential to be a great fishing stream, but the public does not recreate there often as it is known to be one of the biggest sediment contributors to the Bitterroot River; reducing sediment and educating the community about watershed improvements could change people's mind and re-attract people to the stream for fishing. Since the entire project area is on National Forest land, the recreational public will have unregulated access to this site.

E. If the project requires maintenance, what is your time commitment to this project?:

Since we are returning the area to a more natural state, little maintenance will be required. Monitoring will determine if further seeding is needed and if we believe improvements can be made we will re-seed areas as needed.

F. What was the cause of habitat degradation in the area of this project and how will the project correct the cause?:

The project area was previously owned by the Darby Lumber Company. Throughout the 1980's and 1990's the area was heavily roaded and clear cut. In addition to high road density and clear cutting, much of the area burned at high intensity during the fires of 2000, exacerbating chronic sediment loading from road-related sources. The road systems in these sections were not designed with resource protection in mind and have received little to no maintenance since completion of clear cutting. The road beds are eroding, culverts are plugged (some have blown out), and sediment is being delivered directly to stream systems. As a result, Sleeping Child Creek and Rye Creek are both 303(d)-listed and have completed TMDLs for sediment.

To reduce the amount of sediment entering impaired streams and improve water quality, the Bitterroot National Forest (BNF) is partnering with the Bitter Root Water Forum to begin working on "Darby Lumber Lands Phase 1", a project proposing to decommission approximately 68 miles of road, store of 46 miles of road, and decompact 10 miles of jammer and skid trails over 6 years. The "Phase 1" project area includes about 23,000 acres with 10 sections of heavily impacted former railroad lands. BRWF is proposing to complete Sections 1, 3, and 11, restoring >20 miles of roads. WEPP: Roads modeling conducted on a project of similar size and scope in the Martin Creek drainage, suggest that sediment delivery could be reduced by 93%.

Section 1 is considered by BNF hydrologists and soil scientist to be one of the highest priorities for watershed treatment in the overall project area. The road system is particularly degraded in this area and is impacting the headwaters of Sleeping Child Creek. The headwaters area supports a viable local population of Bull Trout, a Federally-listed threatened species, and is mapped as critical habitat for the species. Both Sleeping Child and Rye Creeks contain Westslope Cutthroat Trout, a USFS Region 1 Sensitive Species. Treating Sections 3 and 11 will address similar concerns and advance the overall goals of sediment reduction and habitat enhancement within each watershed. By partnering with BNF to assist in restoration work we will ensure that significant progress is made on Phase 1 in the next five years, allowing for additional phases to be developed and completed more rapidly.

G. What public benefits will be realized from this project?:

The project will reduce sediment delivery to both Rye Creek, one of the largest contributors of sediment to the Bitterroot River, and Sleeping Child Creek, a stream that provides spawning habitat for Bull Trout and Westslope Cutthroat Trout. By reducing sediment we will improve the health of both streams, create better habitat for wild fish, and benefit all water users—anglers and wildlife alike.

H. Will the project interfere with water or property rights of adjacent landowners? (explain):

No. The project is on the Bitterroot National Forest, in sections not adjacent to private land, and will not interfere with water or property rights of downstream landowners.

I. Will the project result in the development of commercial recreational use on the site?: (explain):

The project is intended to remove abandoned roads from the system, thus limiting commercial traffic in the area. There is potential to work with off road users to use BMPs to improve existing trails, but new roads will not be added so commercial recreation will not be increased.

J. Is this project associated with the reclamation of past mining activity?:

No.

Each approved project sponsor must enter into a written agreement with the Department specifying terms and duration of the project.

IV. AUTHORIZING STATEMENT

I (we) hereby declare that the information and all statements to this application are true, complete, and accurate to the best of my (our) knowledge and that the project or activity complies with rules of the Future Fisheries Improvement Program.

Applicant Signature: Heather Mella Date: 11/26/14

Sponsor (if applicable):

***Highlighted boxes will automatically expand.**

Mail To: **Montana Fish, Wildlife & Parks**
Habitat Protection Bureau
PO Box 200701
Helena, MT 59620-0701

E-mail To: **Michelle McGree**
mmcgree@mt.gov

Incomplete or late applications will be returned to applicant.
Applications may be rejected if this form is modified.

*****Applications may be submitted at anytime, but must be received by the Future Fisheries Program office in Helena before December 1 and June 1 of each year to be considered for the subsequent funding period.*****

BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

WORK ITEMS (ITEMIZE BY CATEGORY)	NUMBER OF UNITS	UNIT DESCRIPTION*	COST/UNIT	TOTAL COST	CONTRIBUTIONS			
					FUTURE FISHERIES REQUEST	IN-KIND SERVICES	IN-KIND CASH	TOTAL
Personnel								
Survey				$ -				$ -
Design	150	Hours spent planning and preparing for implementation; developing RFP and hiring subcontractor	$30.00	$ 4,500.00			4,500.00	$ 4,500.00
Engineering				$ -				$ -
Permitting				$ -				$ -
Oversight	900	Hours spent in the field directing excavator work and managing volunteers for seeding	$30.00	$ 27,000.00	10,000.00		17,000.00	$ 27,000.00
Labor	20	Excavator rental, culvert removal and labor/mile	$9,000.00	$ 180,000.00	45,000.00		135,000.00	$ 180,000.00
	1000	Volunteer Hours to seed, fertilize and mulch	$25.00	$ 25,000.00		25,000.00		$ 25,000.00
			Sub-Total	$ 236,500.00	$ 55,000.00	$ 25,000.00	$ 156,500.00	$ 236,500.00
Travel								
Mileage	3600	90 miles round trip, 20 days/field season	$0.55	$ 1,980.00		1,980.00		$ 1,980.00
Per diem				$ -				$ -
			Sub-Total	$ 1,980.00	$ -	$ 1,980.00	$ -	$ 1,980.00
Construction Materials								
Seed, Fertilizer, Mulch, Woody Debris	20	Average amount needed/mile	$450.00	$ 9,000.00			9,000.00	$ 9,000.00
				$ -				$ -
				$ -				$ -

BUDGET TEMPLATE SHEET FOR FUTURE FISHERIES PROGRAM APPLICATIONS

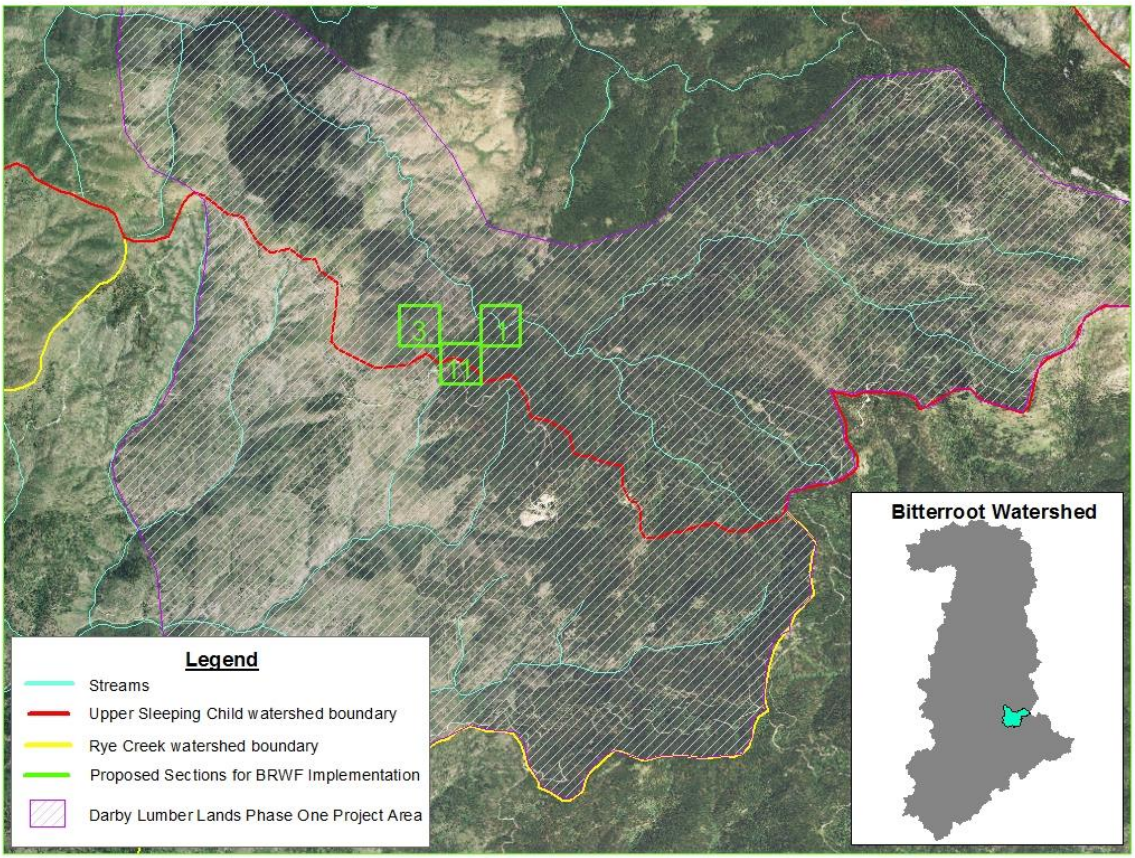
				$ -				$ -
				$ -				$ -
				$ -				$ -
				$ -				$ -
				$ -				$ -
				$ -				$ -
			Sub-Total	$ 9,000.00	$ -	$ -	$ 9,000.00	$ 9,000.00
Equipment								
				$ -				$ -
				$ -				$ -
				$ -				$ -
				$ -				$ -
				$ -				$ -
				$ -				$ -
			Sub-Total	$ -	$ -	$ -	$ -	$ -
Mobilization								
Moving Excavator	2	Round trip to and from project site/season		$ 1,000.00			1,000.00	$ 1,000.00
				$ -				$ -
				$ -				$ -
				$ -				$ -
			Sub-Total	$ 1,000.00	$ -	$ -	$ 1,000.00	$ 1,000.00
			TOTALS	$ 248,480.00	$ 55,000.00	$ 26,980.00	$ 166,500.00	$ 248,480.00

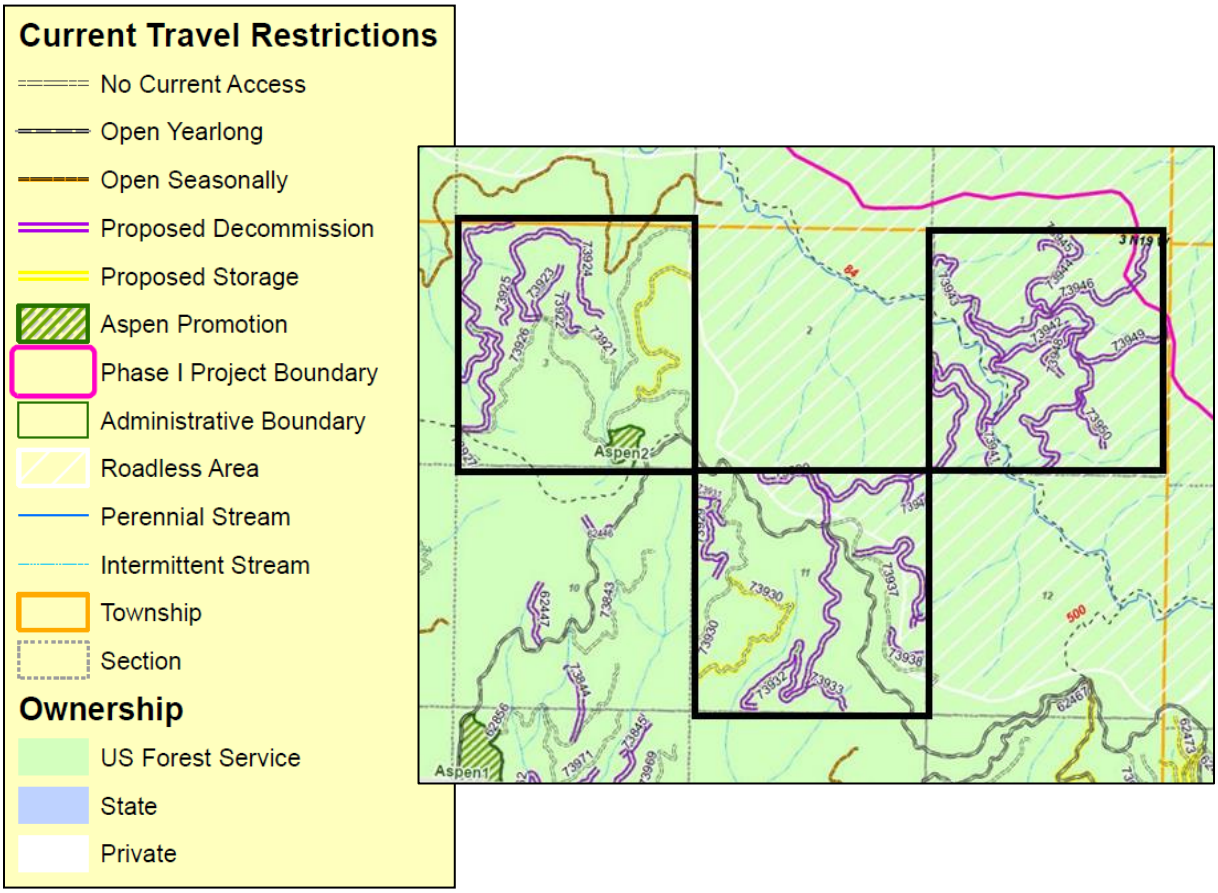
*Units = feet, hours, inches, lump sum, etc.

MATCHING CONTRIBUTIONS

CONTRIBUTOR	IN-KIND SERVICE	IN-KIND CASH	TOTAL	Verified? (Y/N)
MT Department of Environmental Quality	$ -	$ 105,000.00	$ 105,000.00	Y
Bitterroot National Forest		$ 250,000.00	$ 250,000.00	N
Bitterroot Chapter Trout Unlimited	$ -	$ 36,000.00	$ 36,000.00	Y
Univeristy of Montana students, monitoring	$ 10,000.00	$ -	$ 10,000.00	N
Local Citizens, volunteer seeding	$ 16,800.00	$ -	$ 16,800.00	N
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	
	$ -	$ -	$ -	

Watershed Improvement in Upper Sleeping Child Creek and Rye Creek





Existing Conditions in Proposed Project Area: Sleeping Child Creek and Rye Creek Drainages

Section 1 - Road Failure Extending to Sleeping Child Creek – Google Earth

Section 1 - Road Failure Extending to Sleeping Child Creek – Google Earth

USDA United States Department of Agriculture | Forest Service | Bitterroot National Forest | 1801 N. First Hamilton, MT 59840 406-363-7100

File Code: 2500
Date: September 12, 2014

Robert Ray
Watershed Protection Section Supervisor
Water Quality Planning Bureau
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Dear Mr. Ray,

The Bitterroot National Forest (BNF) strongly supports the Bitter Root Water Forum's 319 proposal, "Watershed Improvement through Sediment Reduction in Upper Sleeping Child Creek and Rye Creek".

Hydrologists from BNF assisted in the development of the "Bitterroot Watershed Restoration Plan" and we stand behind the recommendations listed to improve water quality and fish habitat in Bitterroot waterways. The specific actions recommended in "Watershed Improvement through Sediment Reduction in Upper Sleeping Child Creek and Rye Creek" will drastically improve water quality in Sleeping Child Creek, which supports a viable population of resident Bull trout, a Federally-listed threatened species, and Westslope Cutthroat trout, a Region 1 Sensitive Species. The location of proposed BRWF restoration work in the Upper Sleeping Child watershed is especially important as it is a relatively high elevation stream with lower water temperatures and higher habitat potential than in the lower watershed. Extending work into the Rye Creek drainage will also help improve habitat for Westslope Cutthroat and potentially help Bull Trout recovery in the drainage.

The Bitterroot National Forest is excited about partnering with BRWF to implement much needed restoration action in the impaired watersheds of Upper Sleeping Child and Rye Creeks. These watersheds have been identified as "Priority Watersheds" as part of the Watershed Condition Framework - an agency wide effort to improve watershed conditions. A large portion of watershed restoration work will be completed in recently acquired sections that were formerly owned and managed by the Darby Lumber Company. We are looking forward to the opportunity in this project to truly address watershed restoration needs at a landscape level.

Thank you for your time and consideration. Please feel free to contact me or my staff, Cole Mayn at (406)363-7155 if you have further questions.

Sincerely,

Julie K. King

JULIE K. KING
Forest Supervisor

Robert Ray, Watershed Protection Section Supervisor
Water Quality Planning Bureau
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

September 11, 2014

Re: Support for the Bitter Root Water Forum's 319 application, "Watershed Improvement through Sediment Reduction in Upper Sleeping Child Creek and Rye Creek"

Dear Robert,

As a private citizen who lives on Rye Creek, I strongly support the Bitter Root Water Forum's (BRWF) 319 application, "Watershed Improvement through Sediment Reduction in Upper Sleeping Child Creek and Rye Creek".

For years, I have watched banks erode due to an unnatural level of sediment in the waters of Rye Creek. We have had the stream move over 30 feet closer to an expensive fence and orchard over the last several years, and feel the channel's rapid migration is largely due to high sediment loads from upstream. There are several locations on our property where the stream's movement is cutting into high banks, further increasing sediment load downstream. The stream carries a high level of sediment late into the flow season, suggesting a large annual contribution to the Bitterroot River. BRWF has received funding to implement a restoration project on our property and "Watershed Improvement through Sediment Reduction in Upper Sleeping Child Creek and Rye Creek" would be an incredibly complimentary project to enhance and protect the results on our place and protect eroding banks on other properties in the area.

Anything that can be done to reduce the high levels of sediment in Rye Creek is a good thing, and the intention of BRWFs project looks as if it will go a very long way to make drastic improvements to improve the health of Rye Creek and Upper Sleeping Child.

In conclusion, I am very supportive of local efforts to protect and restore our natural resources and believe "Watershed Improvement through Sediment Reduction in Upper Sleeping Child Creek and Rye Creek" is a compelling project that I would like to see on the ground in my watershed.

Sincerely,

Lee McAlpine

C. Lee McAlpine
Rye Creek resident

Environmental Studies Program
Rankin Hall, University of Montana
Missoula, Montana 59812-4320
Phone: (406) 243-6273
Email: evst@mso.umt.edu
http://www.cas.umt.edu/evst

Robert Ray, Watershed Protection Section Supervisor
Water Quality Planning Bureau
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

September 10, 2014

Re: Support for the Bitter Root Water Forum's 319 project proposal:
"Watershed Improvement through Sediment Reduction in Upper Sleeping Child Creek and Rye Creek"

Dear Mr. Ray:

My colleagues and I in the University of Montana Environmental Studies program strongly support the Bitter Root Water Forum's 319 proposal, "Watershed Improvement through Sediment Reduction in Upper Sleeping Child Creek and Rye Creek".

The specific actions called for in the above proposal have a strong chance of significantly improving water quality in Sleeping Child Creek, which supports viable populations of resident Bull trout, a Federally-listed threatened species, and Westslope Cutthroat trout, a Region 1 Sensitive Species. The area where BRWF proposes to work in the Sleeping Child watershed is especially valuable to these fish species as it is relatively high in elevation with lower water temperatures and higher habitat potential than in the lower watershed. Extending restoration work into the Rye Creek drainage will also help improve habitat for Westslope Cutthroat and potentially help Bull Trout recovery in the drainage.

UM faculty and students are interested in the opportunity to monitor/assess and compare current and future conditions in these watersheds. We are already meeting with BRWF, the Forest Service and the Montana Department of Fish, Wildlife and Parks to plan a long term evaluation of how this watershed responds to these, and other, restoration efforts in the area.

Thank you for your time and consideration. Please get in touch if you have further questions.

Sincerely,

Vicki Watson

Dr. Vicki Watson, Professor of Environmental Studies at UM
Vicki.watson@umontana.edu
406-243-5153

Montana Fish, Wildlife & Parks

Robert Ray, Watershed Protection Section Supervisor
Water Quality Planning Bureau
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901
September 16, 2014

Dear Robert,

Montana Fish, Wildlife and Parks supports the Bitter Root Water Forum's 319 proposal, "Watershed Improvement through Sediment Reduction in Upper Sleeping Child Creek and Rye Creek".

MT FWP assisted in the development of the "Bitterroot Watershed Restoration Plan" and we stand behind the recommendations listed to improve water quality and fish habitat in Bitterroot waterways. The specific actions recommended in "Watershed Improvement through Sediment Reduction in Upper Sleeping Child Creek and Rye Creek" will improve water quality in Sleeping Child Creek, which supports a viable population of resident Bull trout, a Federally-listed threatened species, and Westslope Cutthroat trout, a Region 1 Sensitive Species. The area where BRWF is proposing to work in Sleeping Child is especially important as it is relatively high in elevation with lower water temperatures and higher habitat potential than in the lower watershed. Extending work into the Rye Creek drainage will also help improve habitat for Westslope Cutthroat.

MT FWP supports the efforts of BRWF to partner with the Bitterroot National Forest to implement restoration action in the impaired watersheds of Sleeping Child and Rye Creeks. We will support their efforts to procure additional funding to help BRWF meet the match as required by DEQ and believe that this project will be a good candidate for FWP's Future Fisheries Improvement Program.

Thank you for your time and consideration. Please don't hesitate to get in touch if you have further questions.

Sincerely,

Chris Clancy

Chris Clancy
Fisheries Biologist

MONTANA TROUT UNLIMITED
BITTERROOT CHAPTER

September 12, 2014

Robert Ray, Watershed Protection Section Supervisor
Water Quality Planning Bureau
Department of Environmental Quality
P.O. Box 200901
Helena, MT 59620-0901

Re: Support for the Bitter Root Water Forum's 319 project proposal

Dear Robert,

The Bitter Root Chapter Trout Unlimited strongly supports the Bitter Root Water Forum's 319 proposal, "Watershed Improvement through Sediment Reduction in Upper Sleeping Child Creek and Rye Creek". It has been a long held belief in our chapter, that we should do what we can to help support the organizations in the Bitterroot Valley that compliment our mission. The Bitterroot Water Forum is one of those organizations.

We understand that the proposed project is a result of recommendations made in BRWFs WRP, which was developed with input from Montana TU, so we feel confident that actions being taken represent the priorities of TU, "To conserve, protect and restore North America's coldwater fisheries and their watersheds". Specifically, we believe that the size and scope of "Watershed Improvement through Sediment Reduction in Upper Sleeping Child Creek and Rye Creek" make it one of the most significant actions that can be taken to improve water quality in Sleeping Child Creek, which supports a viable population of resident Bull trout, a Federally-listed threatened species, and Westslope Cutthroat trout, a Region 1 Sensitive Species.

The area where BRWF is proposing to work in Sleeping Child is especially important as it is relatively high in elevation with lower water temperatures and higher habitat potential than in the lower watershed. Extending work into the Rye Creek drainage will also help improve habitat for Westslope Cutthroat and potentially help Bull Trout recovery in the drainage.

In addition to implementing high priority recommendations from BRWFs WRP, "Watershed Improvement through Sediment Reduction in Upper Sleeping Child Creek and Rye Creek" will advance initiatives from the 2012 Montana Nonpoint Source Management Plan Five-Year Action Plan and Priorities, specifically to

PO Box 262
Hamilton, MT 59840

MONTANA TROUT UNLIMITED
BITTERROOT CHAPTER

"Encourage and fund WQIP and WRP directed NPS watershed restoration projects…" as well as spur active partnerships in the Bitterroot that will advance on the ground conservation for years to come.

As a chapter we are making it a fiscal priority for the next two years to help support the project and the Bitterroot Water Forum's activities in the project.

Thank you for your consideration. If I can help in any other way, please don't hesitate to get in touch.

Respectfully,

Ross Rademacher
Chapter President
Bitterroot Chapter Trout Unlimited